

The report is required by law (7 USC 2143). Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150.

See reverse side for additional information.

Interagency Report Control No.
0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATION NUMBER: 10-F-0008
CUSTODIAN NUMBER 431

FORM APPROVED
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)**

2. U.S. Department of the Interior
U.S. Geological Survey Biological Resources Discipline
12201 Sunrise Valley Drive, MS 301
Reston, VA 20191

3. **REPORTING FACILITY** (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS (Sites)

A. Field locations. See attached key for USGS Science Centers

C.

B.

D.

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use AOHIS FORM 7023A).

| A. Animals Covered by the Animal Welfare Regulations | B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes. | C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain relieving drugs. | D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used. | E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report.) | F. TOTAL NO. OF ANIMALS (Cols. C + D + E) |
|--|---|---|---|---|--|
| 4. Dogs | | | | | |
| 5. Cats | | 33 | | | 33 (E) |
| 6. Guinea Pigs | | | | | |
| 7. Hamsters | | | | | |
| 8. Rabbits | 2 | | | | 2 (B) |
| 9. Non-human Primates | | | | | |
| 10. Sheep | | | | | |
| 11. Pigs | | | | | |
| 12. Other Farm Animals | | | | | |
| 13. Other Animals | | | | | |

ASSURANCE STATEMENTS

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- Each principal investigator has considered alternatives to painful procedures.
- This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional Official)
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

DATE
SIGNED

12/12/08

(b)(6), (b)(7)c

DEC 22 2008

DEC 15 2008

NP

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See reverse side for additional information.

Interagency Report Control No.
0180-DOA-AN

| | | | | |
|---|--|---|------------------|------------------------------------|
| UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE | | 1. REGISTRATION NO. 10-F-008 | CUSTOMER NO. 431 | FORM APPROVED OMB NO. 0579-0036 |
| CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY | | 2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, U.S. Department of the Interior, Resources Discipline, 12201 Sunrise Valley Drive, MS 30, Reston, VA 20191) | | |

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use this form).

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|----------------------------|---|---|---|--|--|
| Bat, Big Brown | | 12 | | | 12 (J) |
| Bat, Hoary | | 13 | | | 13 (J) |
| Bat, Pacific Sheath-tailed | | 13 | | | 13 (J) |
| Bear, Black | | 21 (B) | 33 (B) + 18 (D) | | 54 (B) + 18 (D) = 72 |
| Bear, Grizzly | | | 34 | | 34 (D) |
| Bear, Polar | | | 111 | | 111 (I) |
| Bobcat | | 6 | | | 6 (G) |
| Caribou | | | 54 | | 54 (I) |
| Coyote | | 10 | | | 10 (G) |
| Chipmunk, Least | | 168 | | | 168 (J) |
| Chipmunk, Palmer's | | 600 | | | 600 (G) |
| Chipmunk, Townsend's | | 750 | | | 750 (F) |
| Deer, Mule | | 22 | | | 22 (G) |
| Deer, White-tailed | | 11 | | | 11 (C) |
| Elk, Roosevelt | | | 12 | | 12 (F) |
| Elk | | 4 (J) | 45 (C) + 30 (D) | | 4 (J) + 45 (C) + 30 (D) = 79 |
| Ermine | | 2 | | | 2 (F) |
| Fox, Arctic | | 25 | | | 25 (I) |

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|---|--|---|--|---|---|
|---|--|---|--|---|---|

| | | | | | |
|-------------------------|-------------------------------------|----------------|--|--|---|
| Gopher, Botta's Pocket | 70 | | | | 70(G) |
| Horse, (feral) | 33 | | | | 33 (J) |
| Jackrabbit | 7 | | | | 7 (G) |
| Kangaroo Rat spp. | 2 | | | | 2 (G) |
| Kangaroo Rat, Dulzura | 409 | | | | 409 (G) |
| Kangaroo Rat, Pacific | 2 | | | | 2 (G) |
| Kangaroo Rat, Stephen's | | 219 | | | 219 (G) |
| Mammal, unknown | 1 | | | | 1 (G) |
| Manatee | 250 | | | | 250 (L) |
| Mole, Coast | 3 | | | | 3 (F) |
| Mole, Shrew | 1 | | | | 1 (F) |
| Moose | | 21 | | | 21 (I) |
| Mouse spp, Unknown | 4 | | | | 4 (J) |
| Mouse, Brush | 21 | | | | 21 (G) |
| Mouse, California | 209 | 4 | | | 213 (G) |
| Mouse, Cactus | 894 | | | | 894 (G) |
| Mouse, Deer | 2834 (J) + 420 (F) + 1042 (G) | 48 (D) + 2 (G) | | | 2834 (J) + 48(A) + 420 (F) + (G) = 4344 |
| Mouse, House | 1 (J) + 58(G) | 2 | | | 1 (J) + 60 (G) = 61 |

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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

| | | |
|--|---|----------------|
| SIGNATURE OF CEO OR INSTITUTIONAL OFFICIAL | NAME AND TITLE OF CEO OR INSTITUTIONAL OFFICIAL | DATE SIGNED |
| (b)(6), (b)(7)c | | 10/12/08 |

APHIS FORM 7023 (Replaces VS Form 18-23 (OCT 88), which is obsolete.)

DEC 22 2008

DEC 15 2008

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| UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY | 1. REGISTRATION NO. 10-F-008 | CUSTOMER NO. 431 | FORM APPROVED OMB NO. 0579-0036 |
| | 2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, U.S. Geological Survey Biological Resources Discipline, 12201 Sunrise Valley Drive, MS 30, Reston, VA 20191) | | |

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use this form).

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|---|--|---|--|---|---|
|---|--|---|--|---|---|

| | | | | | |
|-----------------------------|--|--------------------|-----------------|--------|---------------------------|
| Mouse, Meadow Jumping | | 1 | | | 1 (J) |
| Mouse, Northern grasshopper | | 48 | | | 48 (J) |
| Mouse, Pocket | | 1 | | | 1 (J) |
| Mouse, unknown | | 13 | | | 13 (G) |
| Mouse, Western Harvest | | 213 | 13 | | 226 (G) |
| Mouse, White-footed | | | 30 (A) + 84 (G) | | 30(A) + 84 = 114 |
| Nutria | | | 10 | | 10 (K) |
| Opossum | | 5 | | | 5 (J) |
| Otter, Sea | | 20 (G) + 51 (I) | 10 | | 30 (G) + 51 (I) = 81 |
| Pocket Mouse spp. | | | 9 | | 9 (G) |
| Pocket Mouse, California | | 631 | 16 | | 647 (G) |
| Pocket Mouse, Pacific | | 77 | | | 77 (G) |
| Pocket Mouse, San Diego | | 109 | | | 109 (G) |
| Prairie Dog, Black-tailed | | 47 | 269 | 59 (A) | 316 (J) = 59 (A) = 375 |
| Raccoon | | 1 | | | 1 (J) |
| Rabbit, Brush | | 1 (F) + 6 (G) | | | 1 (F) + 6 (G) = 7 |
| Rabbit, Desert Cottontail | | | 3 | | 3 (G) |
| Rabbit, unknown | | 1 | | | 1 (G) |
| Rat, Malaysian House | | 5 | | | 5 (J) |

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UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. CUSTOMER NO.

10-F-008

431

FORM APPROVED
OMB NO. 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF
RESEARCH FACILITY

2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA,
U.S. Geological Survey Biological
Resources Discipline, 12201 Sunrise Valley Drive,
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|----|---|---|---|---|---|
| | | | | | TOTAL NO. OF ANIMALS (Cols. C + D + E) |

| | | | | | |
|-----------------------------|----------------|-------|--|--|---------------------|
| Rat, unspecified species | 8 | | | | 8 (J) |
| Rat, Polynesian | 48 | | | | 48 (J) |
| Rodent, unknown | 3 | | | | 3 (G) |
| Skunk, Western Spotted | 4 | | | | 4 (F) |
| Shrew, Fog | 20 | | | | 20 (F) |
| Shrew, Grey | 64 | | | | 64 (G) |
| Shrew, Musk | 9 | | | | 9 (J) |
| Shrew, Ornate | 4 | | | | 4 (G) |
| Shrew, Pacific | 24 | | | | 24 (F) |
| Shrew, Trowbridge's | 150 | | | | 150 (F) |
| Shrew, unknown | | | | | |
| Shrew, Vagrant | 4 | | | | 4 (F) |
| Shrew, Ornate | 4 | | | | 4 (G) |
| Shrew, Pacific | 24 | | | | 24 (F) |
| Shrew, Trowbridge's | 150 | | | | 150 (F) |
| Shrew, unknown | | | | | |
| Shrew, Vagrant | 4 | | | | 4 (F) |
| Squirrel, California Ground | 1 (F) + 14 (G) | 1 (G) | | | 1 (F) + 15 (G) = 15 |
| Squirrel, Douglas' | 35 | | | | 35 (F) |

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DEC 22 2008

DEC 15 2008

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
CONTINUATION SHEET FOR ANNUAL REPORT OF
RESEARCH FACILITY

USGS (b)(2)High, (b)(7)f

2. HEADQUARTERS RESEARCH FACILITY (Name/Address, as registered with USDA, include Zip Code)

USGS/ (b)(2)High, (b)(7)f

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|--|---|---|---|--|---|
| Shrew, Ornate | 4 | | | | 4 (G) |
| Shrew, Pacific | 24 | | | | 24 (F) |
| Shrew, Trowbridge's | 150 | | | | 150 (F) |
| Shrew, unknown | | | | | |
| Shrew, Vagrant | 4 | | | | 4 (F) |
| Squirrel, California Ground | | 1 (F) + 14 (G) | 1 (G) | | 1 (F) + 15 (G) = 15 |
| Squirrel, Douglas' | 35 | | | | 35 (F) |
| Squirrel, Northern flying | 140 | | | | 140 (F) |
| Squirrel, Wyoming Ground | 8 | | | | 8 (J) |
| Squirrel, Thirteen-lined Ground | 8 | | | | 8 (J) |
| Vole, California | 41 | | | | 41 (G) |
| Vole, Creeping | 30 | | | | 30 (F) |
| Vole, Long-tailed | 4 | | | | 4 (J) |

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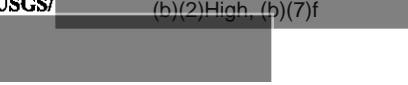
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| SIGNATURE OF C.E.O. OR INSTITUTIONAL | NAME AND TITLE OF C.E.O. OR | DATE SIGNED |
|--------------------------------------|-----------------------------|-------------|
| | (b)(6), (b)(7)c | 12/19/08 |

(AUG 91)

DEC 22 2008

DEC 15 2008

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| UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY USGS/ (b)(2)High, (b)(7)f  | 1. REGISTRATION NO. | FORM | APPROVED OMB NO. 0579-0036 |
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|--|---|---|---|--|--|
| Vole, Meadow | 41(A) | 2 (J) | 114 (A) | | 2 (J) + 155 (A) = 157 |
| Vole, Montane | | 10 | | | 10 (J) |
| Vole, Red-backed | 33 (A) | 60 (F) | 14 (A) + 2 (I) | | 47(A) + 60 (F) + 2 (I) = 109 |
| Vole, Sagebrush | | 71 | | | 71 (J) |
| Vole, Tundra | | | 9 | | 9 (I) |
| Walrus | | 38 | | | 38 (I) |
| Wolf, Gray | | 11 | | | 11 (C) |
| Woodrat spp. | | 1 (J) = 6 (G) | | | 1 (J) + 6 (G) = 7 |
| Woodrat, Bushy-tailed | | 3 | | | 3(F) |
| Woodrat, Desert | | 79 | 3 | | 82 (G) |
| Woodrat, Dusky-footed | | 8 | | | 8 (G) |
| Vole, Sagebrush | | 71 | | | 71 (J) |
| Weasel, Long-tailed Weasel | | 1 | | | 1 (J) |
| Weasel, Short-tailed | | 1 | | | 1 (J) |

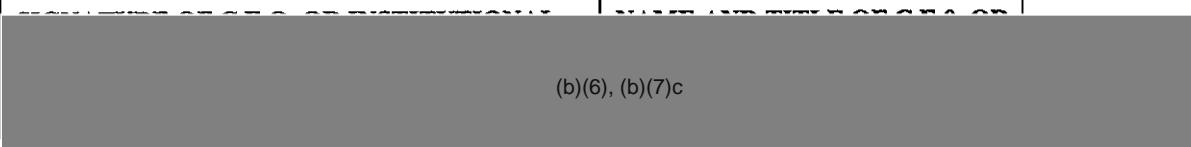
1 Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

2 Each principal investigator has considered alternatives to painful procedures.

3 This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4 The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional Official)**
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

| | |
|-----------------|--|
| | DATE SIGNED  |
| (b)(6), (b)(7)c | 12/12/08 |
| S | |

(AUG 91)

DEC 22 2008

DEC 15 2008

Column E Explanation

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: Customer No. 431, Certificate No. 10-F- 0008
2. Number 59 of animals used in this study.
3. Species (common name) Black-tailed Prairie Dog of animals used in the study.
4. Explain the procedure producing pain and/or distress.

Animals were vaccinated against plague or received a placebo and then challenged with virulent plague to evaluate vaccine efficiency.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see item 6 below)

The purpose of this research is to develop a protective vaccine for both the prairie dog and the ferret. The prairie dogs were utilized to test the efficacy of the plague vaccine. The end point for the experiment is discerning whether or not the control and treated animals have developed the signs and symptoms of the disease and/or if the vaccine has effectively prevented the disease from occurring. Therefore it is critical for the disease process to occur without the confounding effects of tranquilizing, analgesic or anesthetic drugs. Animals were euthanized as soon as the signs and symptoms of an infection were observed and confirmed.

6. What, if any, federal regulations require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR 113.102):

Agency N/A CFR N/A

DEC 22 2008

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